# United States Patent [19]

## Kim et al.

[11] **Patent Number:** 5,825,569

[45] **Date of Patent:** Oct. 20, 1998

[54] **CONSTANT-DENSITY MAGNETIC DISC APPARATUS AND MAGNETIC DISC USED THEREFOR**

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[21] Appl. No.: **597,312**

[22] Filed: **Feb. 6, 1996**

[30] **Foreign Application Priority Data**

Feb. 8, 1995 [KR] Rep. of Korea ..................... 2270/1995

[51] Int. Cl.$^6$ ................................................. G11B 20/12
[52] U.S. Cl. ............................................. 360/51; 360/48
[58] Field of Search .................. 360/48, 49, 51, 360/77.08

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[57] **ABSTRACT**

A magnetic disc used in a constant-density magnetic disc driving apparatus includes a wedge identification field following a servo information area that contains a wedge identification for identifying a plurality of data sectors located within a corresponding data information area. A pseudo identification field positioned at a first portion of each data sector represents a time interval required to generate from the wedge identification a pseudo identification that identifies a corresponding one of the data sectors and transfer the pseudo identification to a controller of the magnetic disc driving apparatus. The pseudo identification field includes a data preamble for providing data synchronization for the corresponding data sector. A data field is positioned behind the pseudo identification field, and the data field and pseudo identification field make up a single data sector. Data that is identified by the pseudo identification and synchronized by the data preamble is written in the data field.

**13 Claims, 5 Drawing Sheets**